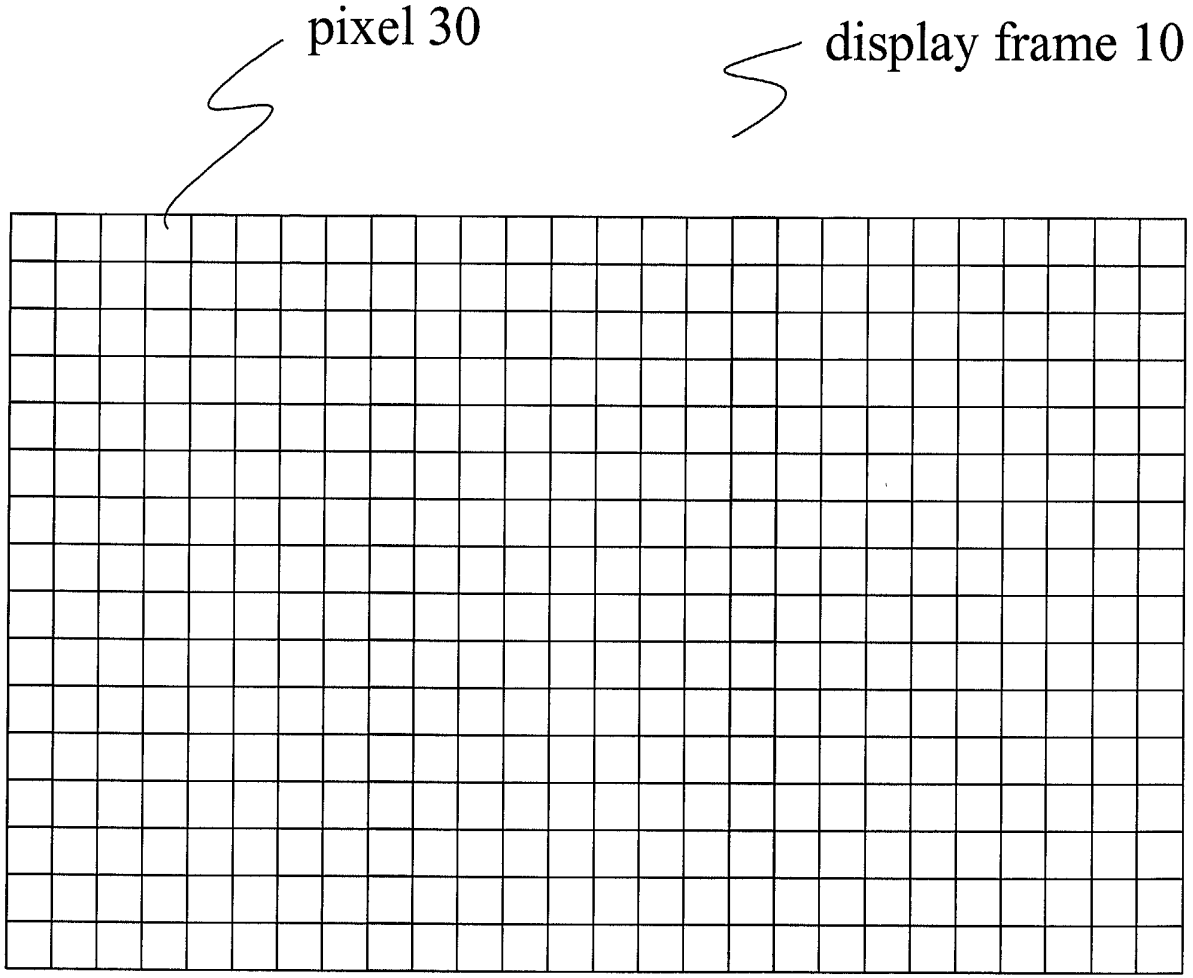


FIG. 1

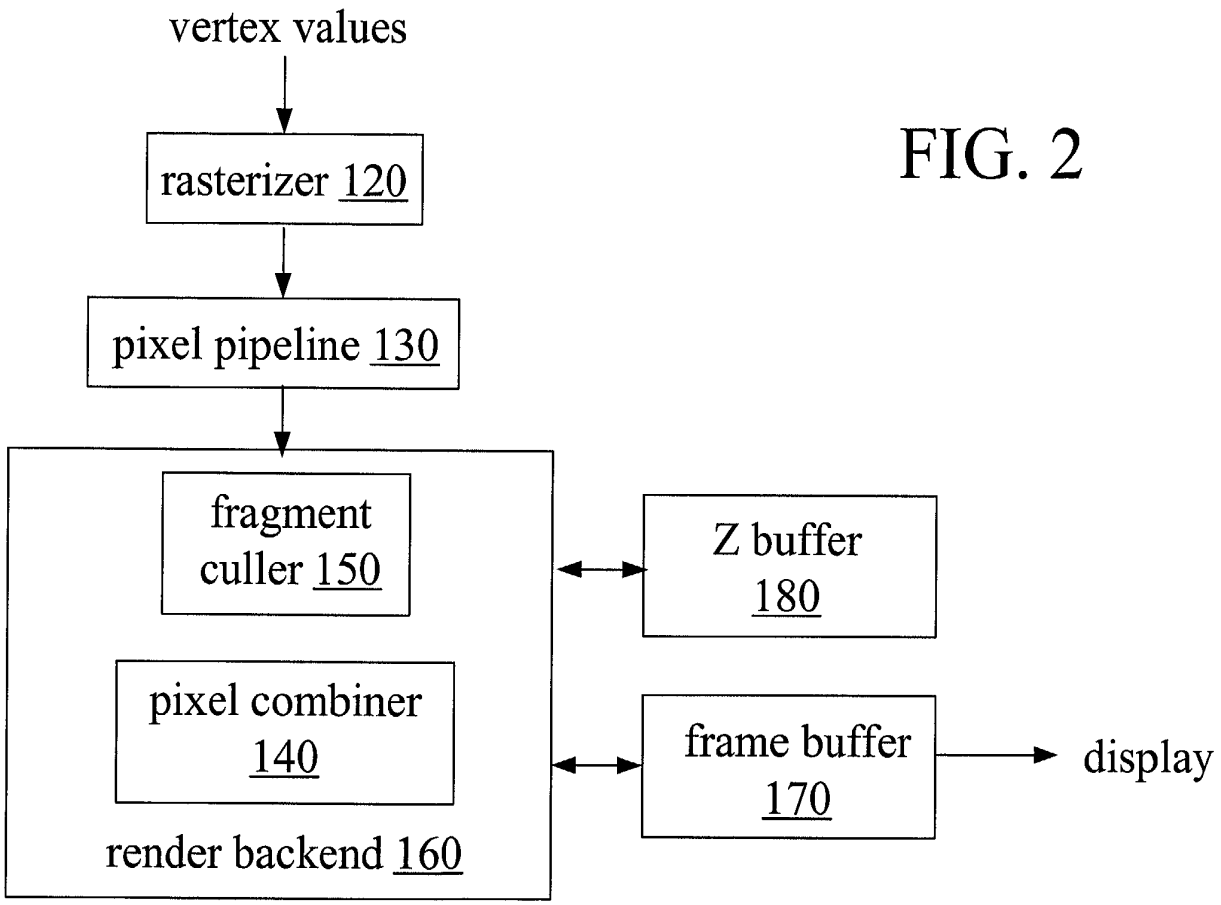


FIG. 2

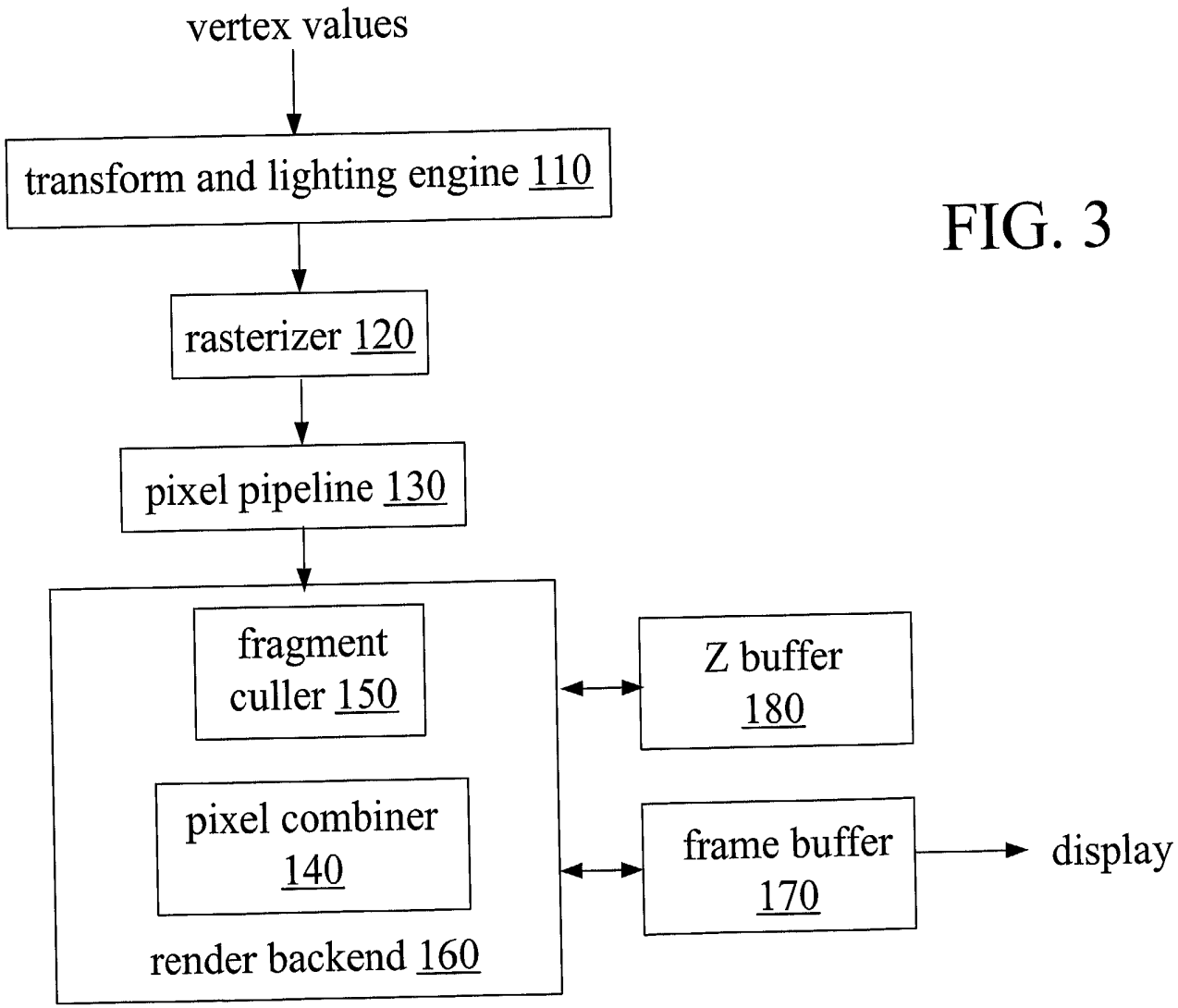


FIG. 3

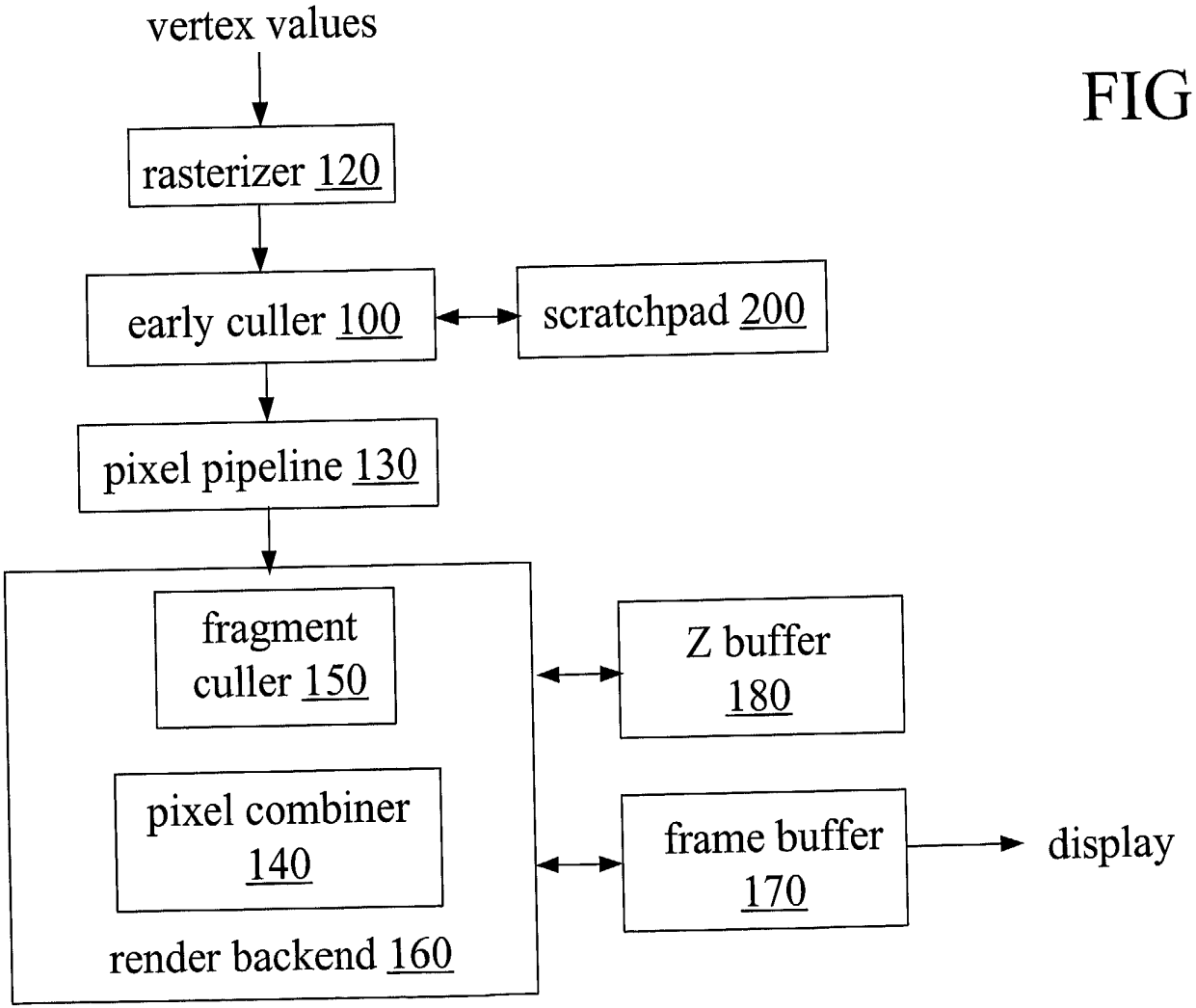


FIG. 4

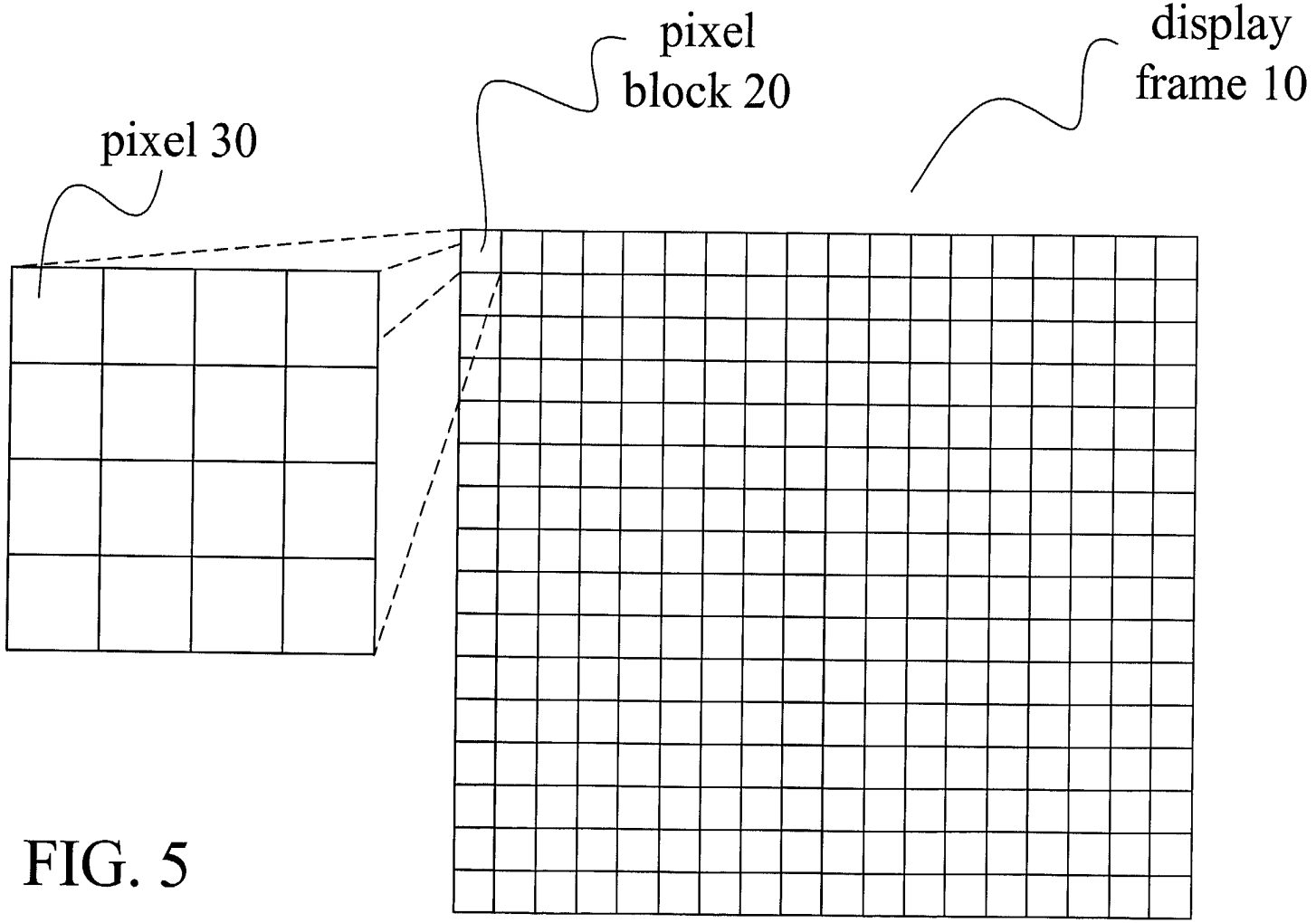


FIG. 5

FIG. 6

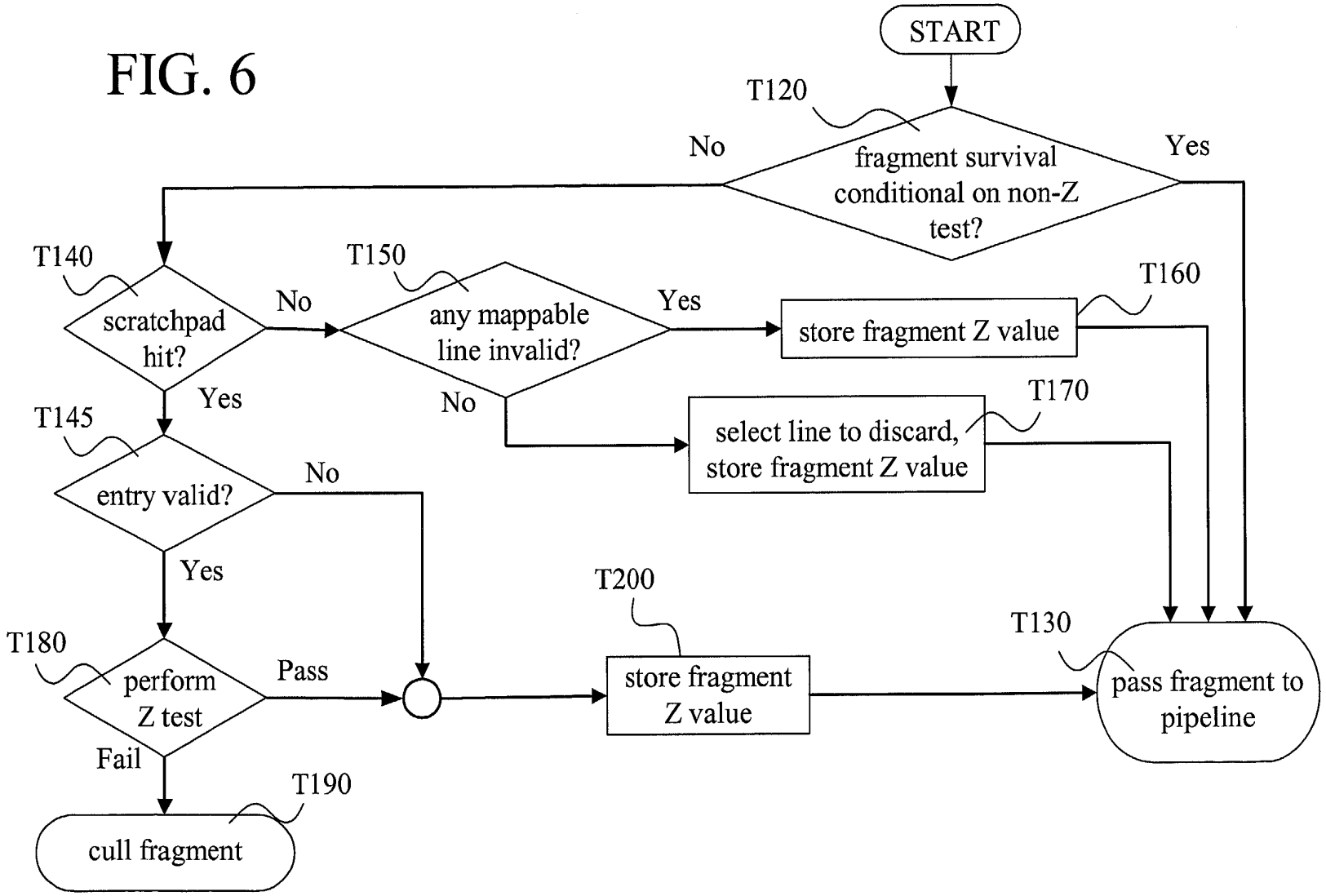
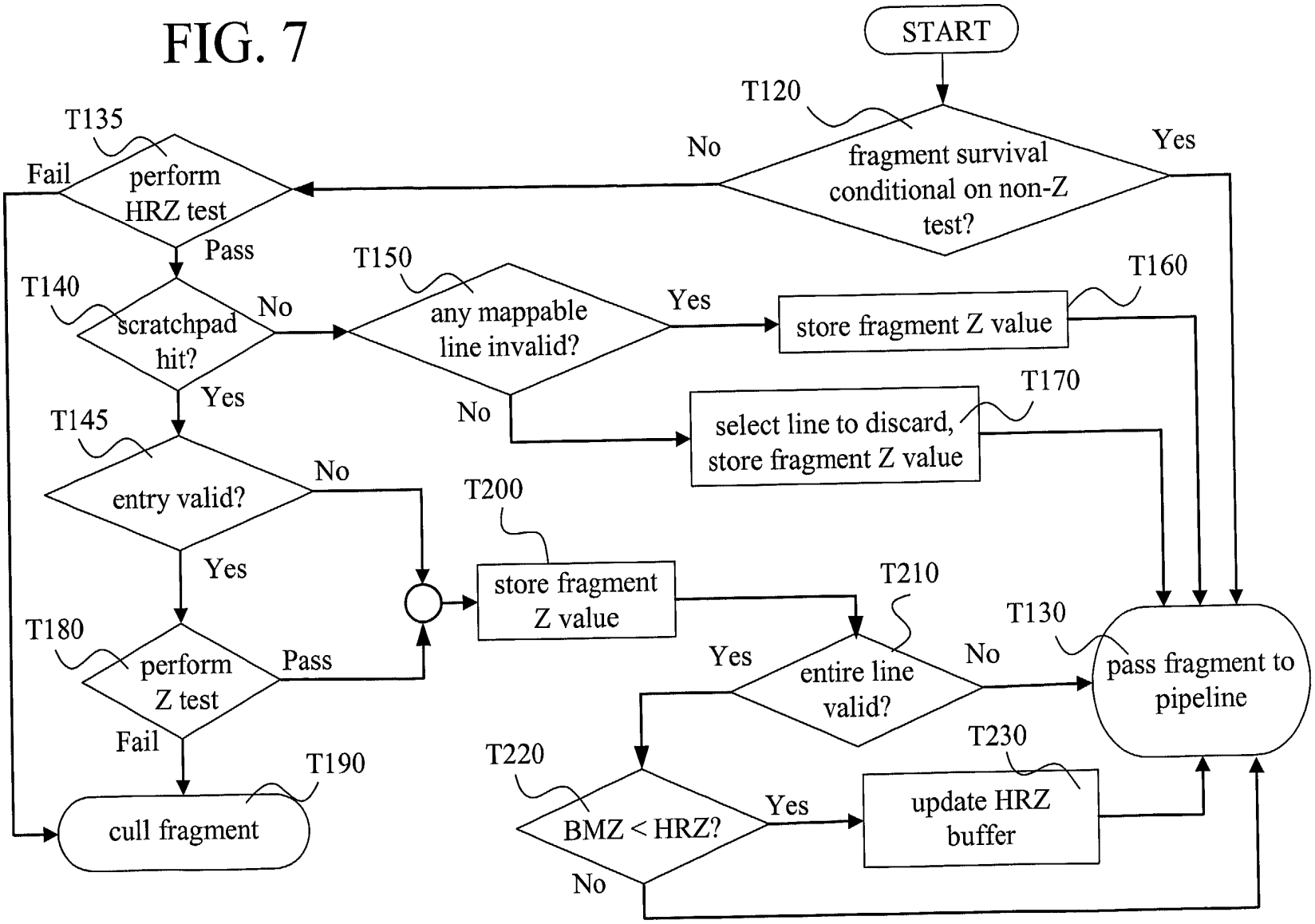

START
T120
fragment survival conditional on non-Z test?
No
Yes
T140
scratchpad hit?
No
T150
any mappable line invalid?
Yes
T160
store fragment Z value
Yes
No
T145
entry valid?
No
T170
select line to discard, store fragment Z value
Yes
T200
store fragment Z value
T130
pass fragment to pipeline
T180
perform Z test
Pass
Fail
T190
cull fragment

FIG. 7


START
T120
fragment survival conditional on non-Z test?
No
Yes
T135
perform HRZ test
Fail
Pass
T140
scratchpad hit?
No
Yes
T150
any mappable line invalid?
Yes
No
T160
store fragment Z value
T170
select line to discard, store fragment Z value
T145
entry valid?
No
Yes
T200
store fragment Z value
T180
perform Z test
Pass
Fail
T190
cull fragment
T210
entire line valid?
Yes
No
T130
pass fragment to pipeline
T220
BMZ < HRZ?
Yes
No
T230
update HRZ buffer

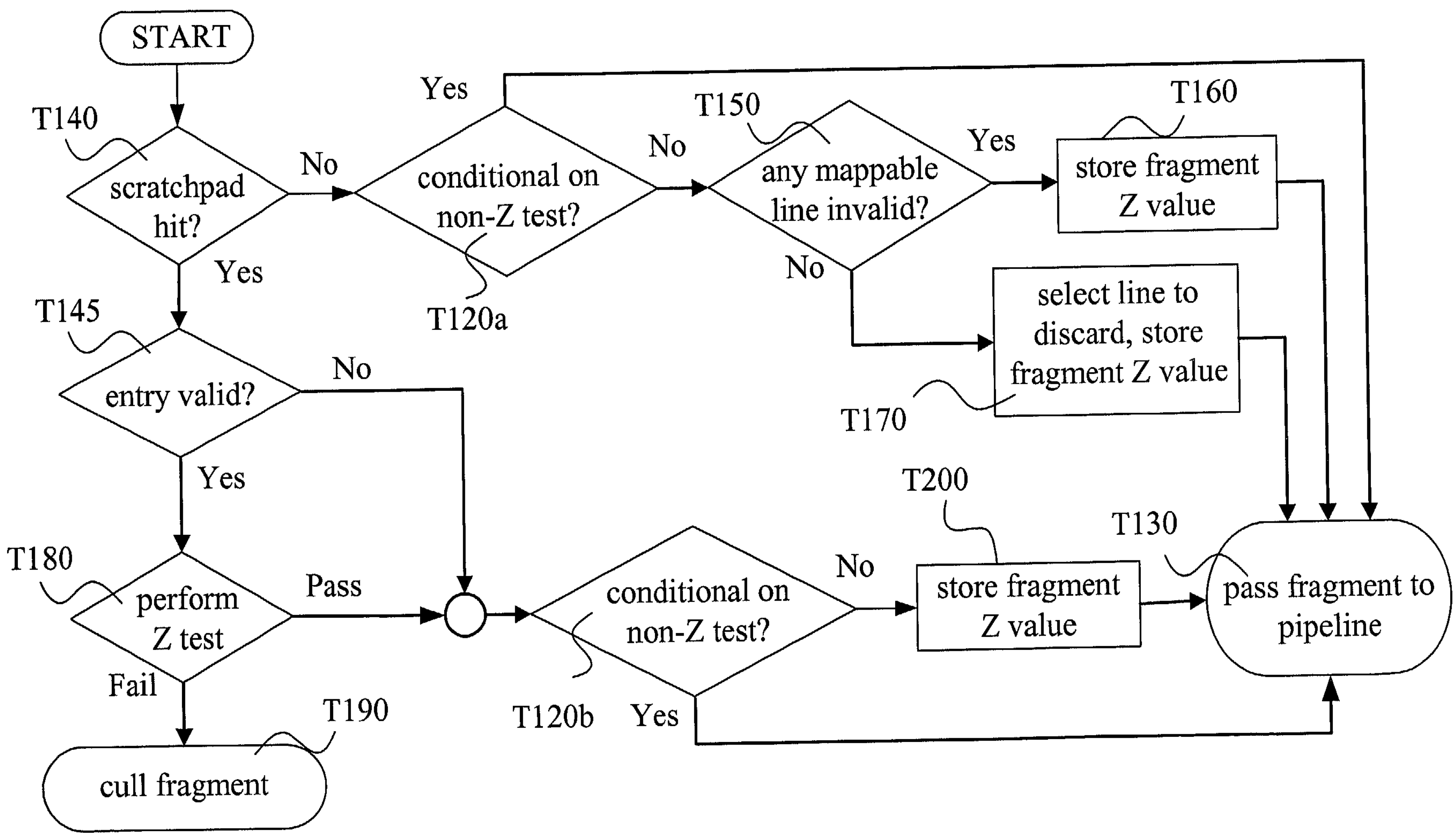

START
T140
scratchpad hit?
No
Yes
conditional on non-Z test?
T120a
T150
any mappable line invalid?
T160
store fragment Z value
select line to discard, store fragment Z value
T170
T145
entry valid?
T180
perform Z test
Pass
Fail
T190
cull fragment
conditional on non-Z test?
T120b
T200
store fragment Z value
T130
pass fragment to pipeline

FIG. 8

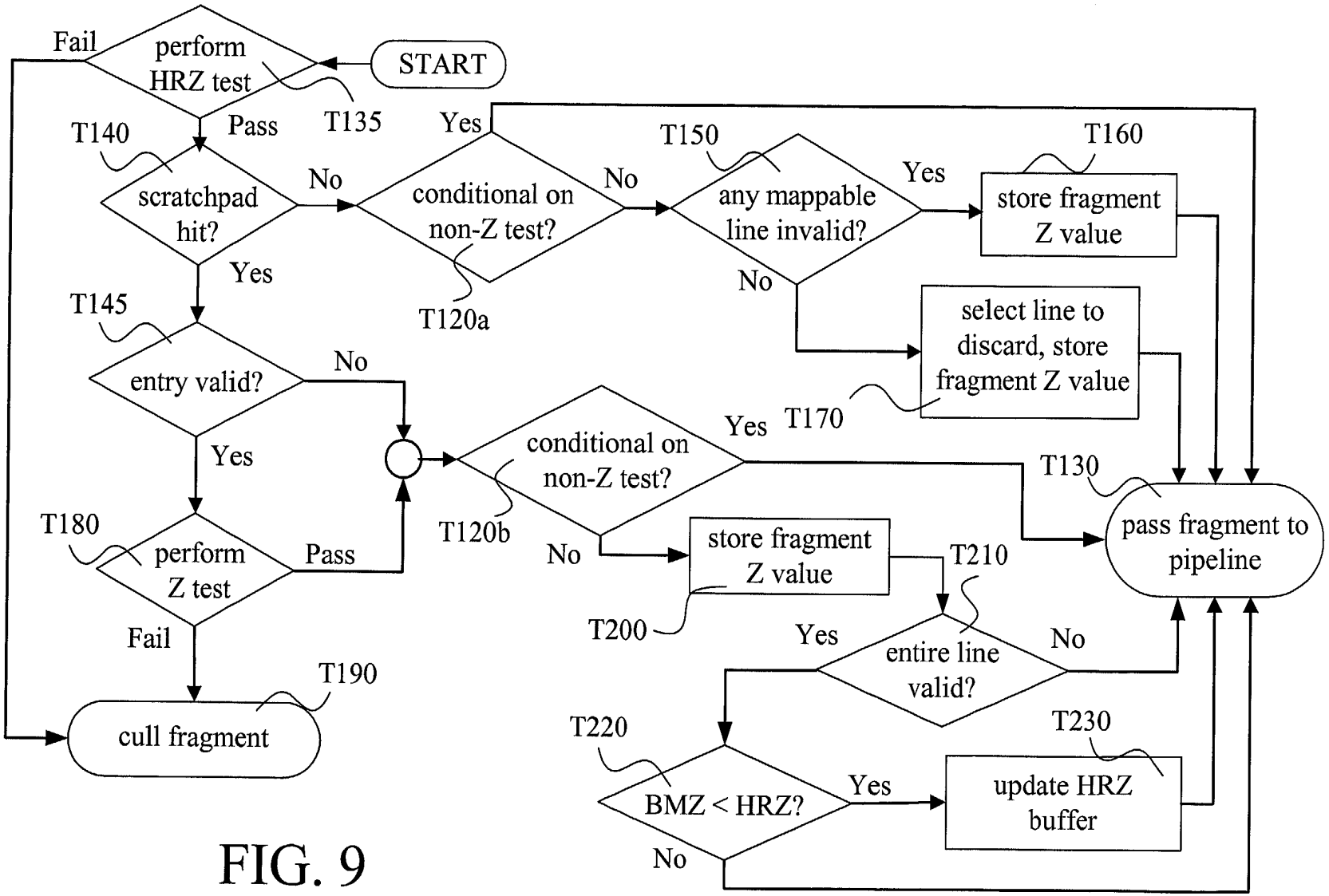

START
perform HRZ test
Fail
Pass
T135
T140
scratchpad hit?
No
Yes
T145
entry valid?
No
Yes
T180
perform Z test
Pass
Fail
T190
cull fragment
conditional on non-Z test?
Yes
No
T120a
T150
any mappable line invalid?
Yes
No
T160
store fragment Z value
select line to discard, store fragment Z value
T170
conditional on non-Z test?
Yes
No
T120b
T130
pass fragment to pipeline
store fragment Z value
T200
T210
entire line valid?
Yes
No
T220
BMZ < HRZ?
Yes
No
T230
update HRZ buffer

FIG. 9

FIG. 10

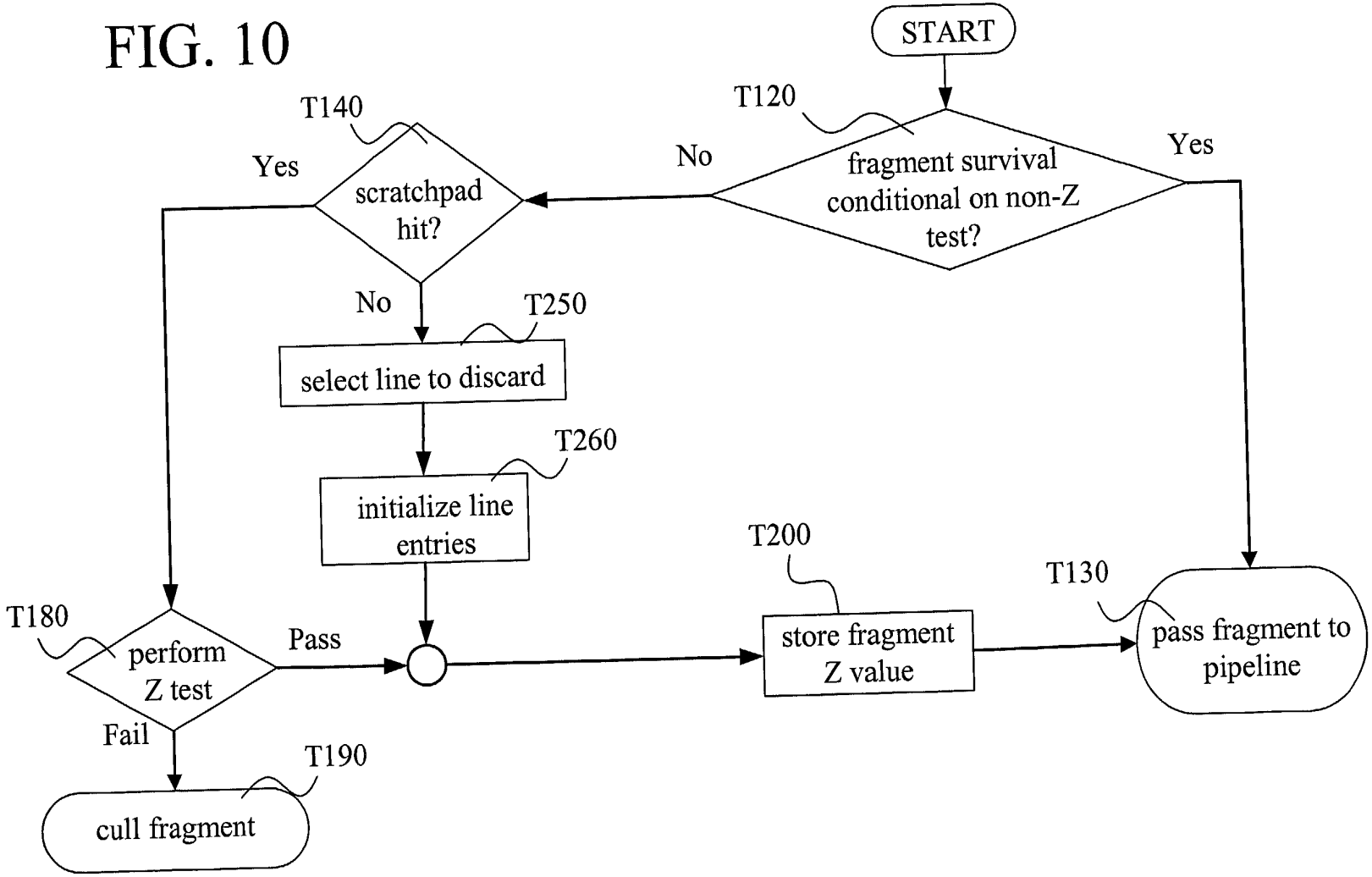
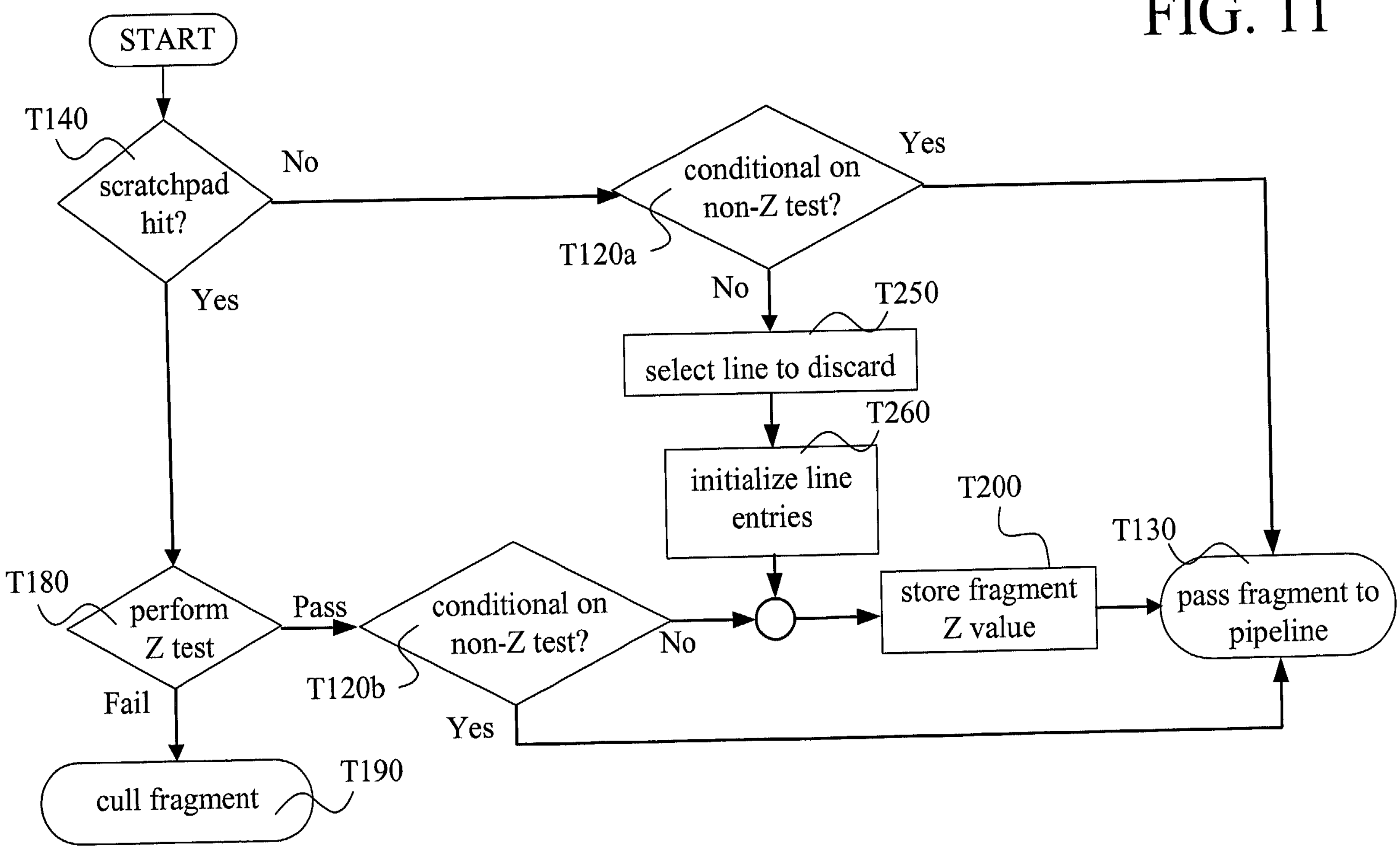

START
T120
fragment survival conditional on non-Z test?
No
Yes
T140
scratchpad hit?
Yes
No
T250
select line to discard
T260
initialize line entries
T200
store fragment Z value
T130
pass fragment to pipeline
T180
perform Z test
Pass
Fail
T190
cull fragment

FIG. 11



START
T140
scratchpad hit?
No
Yes
conditional on non-Z test?
T120a
Yes
No
T250
select line to discard
T260
initialize line entries
T200
store fragment Z value
T130
pass fragment to pipeline
T180
perform Z test
Pass
Fail
conditional on non-Z test?
T120b
No
Yes
cull fragment
T190

FIG. 12

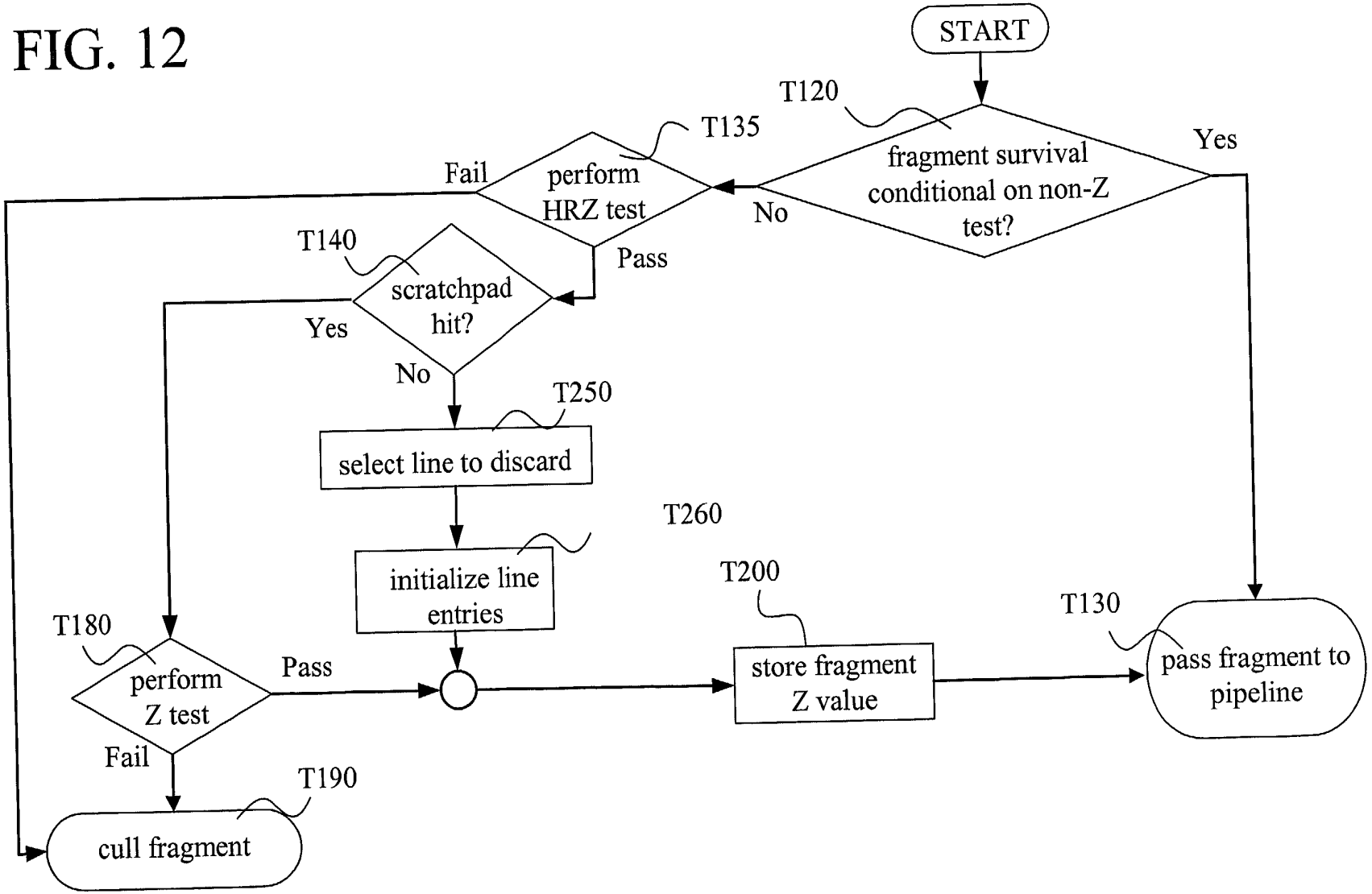
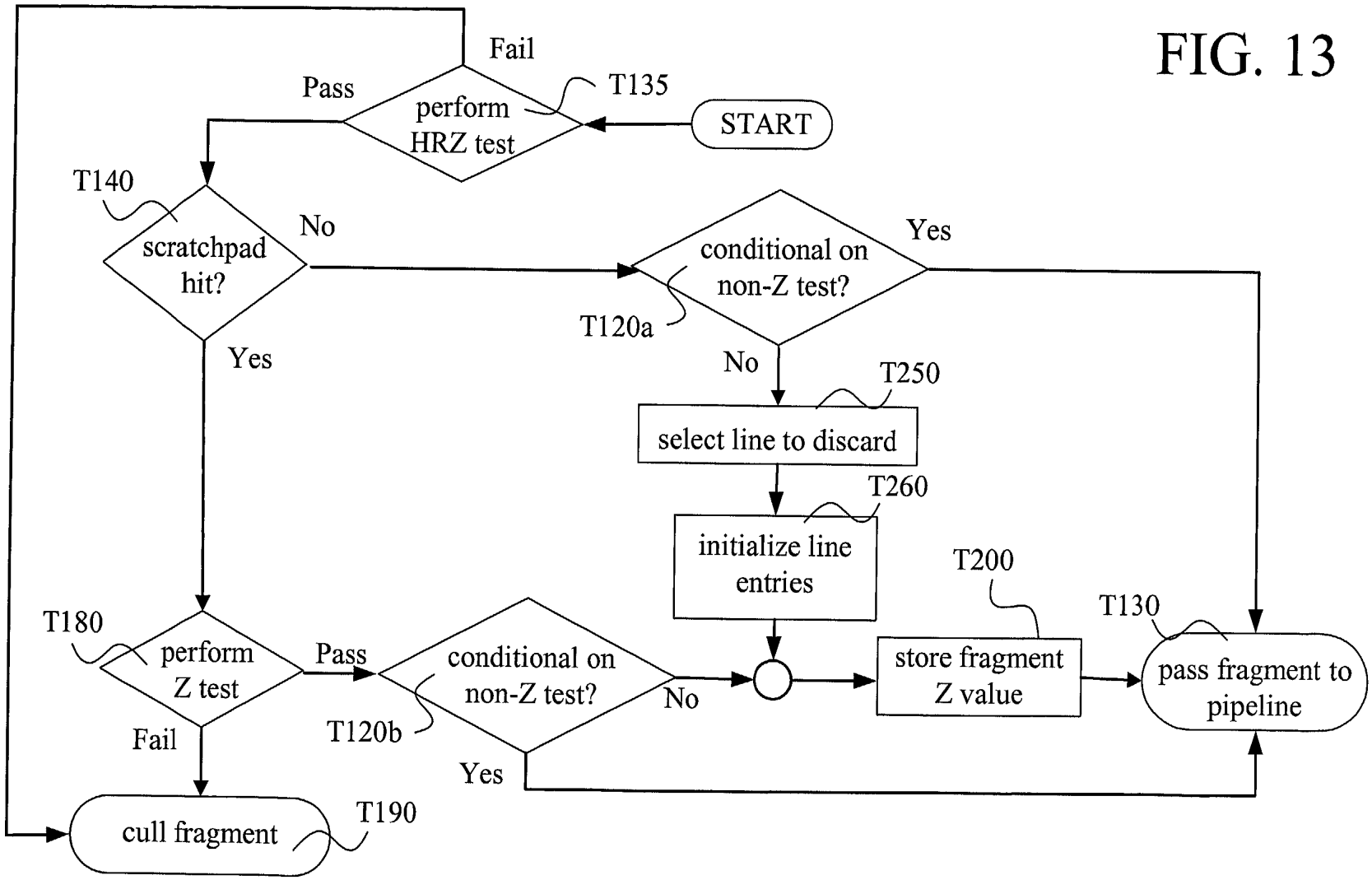

START
T120
fragment survival conditional on non-Z test?
Yes
No
T135
perform HRZ test
Fail
Pass
T140
scratchpad hit?
Yes
No
T250
select line to discard
T260
initialize line entries
T200
store fragment Z value
T130
pass fragment to pipeline
T180
perform Z test
Pass
Fail
T190
cull fragment

FIG. 13


START
perform HRZ test
T135
Fail
Pass
T140
scratchpad hit?
No
Yes
conditional on non-Z test?
T120a
Yes
No
T250
select line to discard
T260
initialize line entries
T200
store fragment Z value
T130
pass fragment to pipeline
T180
perform Z test
Pass
Fail
conditional on non-Z test?
T120b
No
Yes
cull fragment
T190